

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Amend claims 1-3 and 5, as follows.

**Listing of Claims:**

- 1           1. **(Currently amended)** A method for performing multi-counter  
2     evaluation of a text, said method comprising computer-implemented steps  
3     of:  
4           applying to the text a finite-state machine augmented with state  
5     value lists, where each state value list indicates which counter of the multi-  
6     counter scores receive receives which values value for the state, and  
7     state;  
8           state scores are accumulated accumulating the values of the states  
9     separately for each counter of the multi-counter, thereby producing a list of  
10    counter scores. scores; and  
11           ~~returning the counter scores.~~  
12           updating each counter with its counter score.
  
- 1           2. **(Currently amended)** A method for performing multi-counter  
2     evaluation of a text, said method comprising computer-implemented steps  
3     of:  
4           applying to the text a finite-state machine augmented with state  
5     value lists, where each state value list indicates which patterns in which  
6     counters of the multi-counter are found when the state is entered and ;  
7           producing a list of patterns is produced for each counter; and  
8           ~~returning the lists of found patterns.~~  
9           updating each counter with its list of patterns.

1           **3. (Currently amended)** A method for constructing a multi-  
2 counter finite-state machine augmented with state value lists, said method  
3 comprising the computer-implemented steps of:  
4           providing by computer an empty augmented finite-state machine  
5 that has only a start state, with no transitions and no value list; ~~and~~  
6           accumulating each by computer a finite-state machine of each  
7 counter of the multi-counter that corresponds to one or more pattern-  
8 amount pairs into the augmented finite-state machine to form a merged  
9 machine, including  
10          converting state values of states of the finite-state machines of the  
11 counters of the multi-counter into state-value lists of states of the merged  
12 ~~machine. machine, and~~  
13          updating the merged machine with the state-value lists.

1           **4. (Previously presented)** The method of claim 3, wherein the  
2 step of accumulating a finite-state machine of each counter of the multi-  
3 counter that corresponds to one or more pattern-amount pairs into the  
4 augmented finite-state machine to form a merged machine further  
5 comprises the computer-implemented steps of:  
6          forming states for the merged machine that correspond to pairs of  
7 states that can be reached by starting the finite-state machine of a counter  
8 of the multi-counter and the augmented finite-state machine in the their  
9 start states and applying the machines finite-state machine of the counter  
10 and the augmented finite-state machine to a text in unison, with each the  
11 finite-state machine of the counter and the augmented finite-state machine  
12 advancing through each text character simultaneously;  
13          forming states for the merged machine that correspond to one of  
14 the finite-state machine of the counter and the augmented finite-state  
15 machine having halted while the other another of the finite-state machine

16 of the counter and the augmented finite-state machine continues to  
17 advance through the text;

18 for each merged machine state, if there is a corresponding state of  
19 the augmented finite-state machine state of the counter and it has a value  
20 list, then copying the value list to form the value list for the new merged  
21 machine state;

22 for each merged machine state, if there is a corresponding state of  
23 the finite-state machine of the counter state, it has value a value, and the  
24 merged machine state has no value list, then forming a new empty value  
25 list for the merged machine state;

26 for each merged machine state, if there is a the corresponding state  
27 of the finite-state machine of the counter state and it has value a value,  
28 then adding a reference to the counter corresponding to the finite-state  
29 machine and the value value, to the value list for the merged machine  
30 state;

31 for each merged machine state with a corresponding first state of  
32 the augmented finite-state machine state and a corresponding second  
33 state of the finite-state machine state of the counter, for each character in  
34 transitions from both the first and the second states, forming a transition  
35 for from the merged machine state, with destination of the transition being  
36 a state of the merged machine state corresponding to the states of the  
37 augmented finite-state machine and the finite-state machine of the counter  
38 that are the destinations of the transitions from the first and the second  
39 states;

40 for each merged machine state with a corresponding third state of  
41 the augmented finite-state machine state and a corresponding fourth state  
42 of the finite-state machine state, of the counter, for each character in a  
43 transition from only one of the third and the fourth corresponding states,  
44 forming a transition for from the merged machine state, with destination of  
45 the transition being a state of the merged machine state corresponding to

46 the state of the augmented finite-state machine or the finite-state machine  
47 of the counter that is the destination of the transition from the third or the  
48 fourth state and the machine without the transition from the third or the  
49 fourth state having halted; and  
50 for each merged machine state with a corresponding fifth state of  
51 the augmented finite-state machine state or a corresponding sixth state of  
52 the finite-state machine state of the counter but not both, for each  
53 character in a transition from the fifth or the sixth corresponding state,  
54 forming a transition for from the merged machine state, with destination of  
55 the transition being a state of the merged machine state corresponding to  
56 the state of the augmented finite-state machine or the finite-state machine  
57 of the counter that is the destination of the transition from the fifth or the  
58 sixth state and the machine without the transition from the fifth or the sixth  
59 state having halted.

1 5. **(Currently amended)** A method for adding a pattern that  
2 consists of a single sequence of characters and a corresponding pattern  
3 value value, from a counter to an augmented finite-state machine, said  
4 method comprising the computer-implemented steps of:  
5 providing a pattern the pattern;  
6 providing a corresponding the corresponding pattern value;  
7 providing an the augmented finite-state machine having a plurality  
8 of machine states;  
9 advancing through the machine states as by applying the machine  
10 to the sequence of characters as a text;  
11 if the machine would halt when applied to the sequence of  
12 characters as a text, then adding states and transitions to the machine to  
13 prevent halting; and  
14 forbearing from the adding if the machine would not halt when  
15 applied to the sequence of characters as a text;

16           for the a final state that would be reached by the machine  
17   supplemented with the added states and transitions, forming a state value  
18   list if the final state lacks one a state value list, forbearing from forming a  
19   state value list if the final state has a state value list, and adding to the  
20   state value list a reference to the counter and the pattern ~~value~~; and  
21           updating the final state of the machine with the state value list.